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REMARKS

Claims 1 to 30 are pending in this application. Claims 1, 7, 9, 12, 15, 19 and 25 are the independent claims. Claims 4, 22 to 24 are cancelled without prejudice. Claims 27 to 30 are new. Favorable reconsideration and further examination are respectfully requested.

Initially, Applicants thank the Examiner for conducting an interview on Thursday, May 15, 2008. Applicants discussed the §112 rejection and the rejection to claim 1. No other claims were discussed and no agreement was reached between the Examiner and the Applicants on the claims.

Claims 1 to 14, 25 and 26 were rejected under 35 U.S.C §112, second paragraph, because the term "same context command FIFO" is allegedly indefinite. Applicants have amended claims 1, 7 and 25 to recite that the "same-context-command FIFOs [are] configured to store commands of a same context." Applicants respectfully submit that with respect to claims 9 and 12 that one skilled in the art would understand the meaning of same-context-command FIFO as used in the specification (see, for example, page 9 lines 1 to 7). Furthermore, Applicants are entitled to be their own lexicographer (see, MPEP §2101.01 part IV). Based on the foregoing claim amendments and remarks, Applicants respectfully request withdrawal of the §112 rejections. Applicants are willing to consider an Examiner's amendment to amend claims 9 and 12 to be similar to claim 1 with respect to this term.

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Claims 7 to 14 were rejected under 35 U.S.C. § 103(a) as being obvious over Kimmel in view of Yung. (U.S. Patent Number 5,592,679 hereinafter "Yung") and in view of Sihlbom.

With respect to independent claims 9 and 12 none of the cited art disclose or suggest a processor that includes a plurality of cryptographic acceleration units (emphasis added). The Examiner has indicated that Fig. 1A and units 10 and 11 of Kimmel disclose cryptographic acceleration units. However, Kimmel does not teach cryptographic acceleration units. Therefore, Applicants submit that with respect to claims 9 and 12 the Examiner has failed to establish a *prima facie* obviousness rejection.

Independent claim 7 has corresponding features to claim 1. Applicants submit that the Sihlbom and the Kimmel references should also be withdrawn with respect to claim 7 for at least the same reasons as claim 1. Moreover, the Yung reference does not disclose or suggest a scheduler configured to receive the first command from the command FIFO and to if a first core is idle, determine whether a second core is idle; if the second core is not idle and the second core is processing a second command associated with a second context, determine whether the second context is the same as the first context and if the second context is the same as the first context, store the first command in a second same-context command FIFO. Therefore, whether taken separately or in combination, the cited references do not disclose a scheduler as recited in claim 7.

Claims 1 to 6, 15 to 26 were rejected under 35 U.S.C. § 103(a) as being obvious over Kimmel et al. (U.S. Patent Number 6,105,053 hereinafter "Kimmel") in view of Sihlbom et al (U.S. Patent Publication No. 2002/0188885 hereinafter "Sihlbom").

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Amended claim 1 is directed to a processor that includes a command first-in-first-out (FIFO) configured to store commands. The commands comprising a first command associated with a first context. The processor also includes cores that including a first core and a second core and same-context-command FIFOs configured to store commands of a same context The same-context-command FIFOs include a first same-context command FIFO coupled to the first core and a second same-context-command FIFO coupled to the second core. The processor further includes a scheduler configured to receive the first command from the command FIFO and to if a first core is idle, determine whether a second core is idle; if the second core is not idle and the second core is processing a second command associated with a second context, determine whether the second context is the same as the first context and if the second context is the same as the first context, store the first command in the second same-context-command FIFO.

The applied art is not understood to disclose or to suggest the foregoing features of claim 1. In particular, neither Kimmel nor Sihlborn separately or in combination disclose or suggest a scheduler configured to receive the first command from the command FIFO and to if a first core is idle, determine whether a second core is idle; if the second core is not idle and the second core is processing a second command associated with a second context, determine whether the second context is the same as the first context and if the second context is the same as the first context, store the first command in a second same-context-command FIFO.

Kimmel describes that scheduling is performed at a scheduling level which is a level in a hierarchical tree and that the scheduling includes "promote, "help" and "poach" functions (see

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column 9, lines 56 to column 11, line 12). As understood by Applicants, none of Kimmel's scheduling functions are the same as recited in claim 1.

Silhlborn was cited by the Examiner to make-up for the deficiencies in Kimmel of not teaching a multi-processing system in one core and that the each command queue may be a FIFO queue. Moroever, Sihlborn does not disclose a scheduler much less a schedule configured to receive the first command from the command FIFO and to if a first core is idle, determine whether a second core is idle; if the second core is not idle and the second core is processing a second command associated with a second context, determine whether the second context is the same as the first context and if the second context is the same as the first context, store the first command in a second same-context-command FIFO.

Accordingly, for at least the reasons indicated above, even if Sihlborn were combined with Kimmel, the resulting hypothetical combination would not disclose or suggest a scheduler configured to receive the first command from the command FIFO and to if a first core is idle, determine whether a second core is idle; if the second core is not idle and the second core is processing a second command associated with a second context, determine whether the second context is the same as the first context and if the second context is the same as the first context, store the first command in a second same-context-command FIFO. For at least this reason, claim 1 is believed to be allowable.

Independent claims 15, 19 and 25 have corresponding features to claim 1. Applicants submit that the Sihlborn and the Kimmel references should also be withdrawn with respect to claims 15, 19 and 25 for at least the same reasons as claim 1.

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Applicants further submit that dependent claims 18, 20, 21 and 26 to 30 are also distinguished from the cited art. None of the cited reference discloses or suggests that the first core and the second core are one of a cypher core or an authentication core.

For at least the foregoing reasons, Applicants request withdrawal of the art rejection.

Applicants submit that all dependent claims now depend on allowable independent claims.

It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for withdrawing the prior art cited with regards to any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

Applicants submit that the entire application is now in condition for allowance. Such action is respectfully requested at the Examiner's earliest convenience.

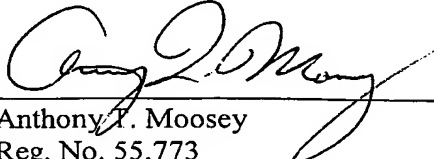Applicants' attorney can be reached by telephone at (781) 401-9988 ext. 123.

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No fee is believed to be due for this Response; however, if any fees are due, please apply such fees to Deposit Account No. 50-0845 referencing Attorney Docket: INTEL-012PUS.

Respectfully submitted,

Date: 23 May 2008

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